APPENDIX

The claims on appeal are as follows:

ALW 39. A purified LAV λJ19 DNA fragment consisting of a restriction fragment generated by the *Bam*HI site at approximately 8150 to the *Bgl*II site at approximately 9150.

40. A purified LAV λJ19 DNA fragment consisting of a restriction fragment generated by the *Bam*HI site at approximately 8150 to the BglII site at approximately 8750.

41. A purified LAV λJ19 DNA fragment consisting of a restriction fragment generated by the *Kpn*I site at approximately 6100 to the *Bgl*II site at approximately 6500.

42. A purified LAV λJ19 DNA fragment consisting of a restriction fragment generated by the *Kpn*I site at approximately 6100 to the *Bgl*II site at approximately 8750.

43. A purified LAV λJ19 DNA fragment consisting of a restriction fragment generated by the *Kpn*I site at approximately 6100 to the *Bgl*II site at approximately 9150.

44. A purified LAV λJ19 DNA fragment consisting of a restriction fragment generated by the *Kpn*I site at approximately 3500 to the *Kpn*I site at approximately 6100.

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45. A purified LAV λJ19 DNA fragment consisting of a restriction fragment generated by the *Kpn*I site at approximately 3900 to the *Kpn*I site at approximately 6100.

46. A purified DNA fragment of HIV-1 consisting of a restriction fragment generated by the *Bam*HI site at approximately 8150 to the *Bgl*II site at approximately 9150, wherein said numbering scheme is based upon the restriction map of LAV isolate λJ19.

47. A purified DNA fragment of HIV-1 consisting of a restriction fragment generated by the *Bam*HI site at approximately 8150 to the BglII site at approximately 8750, wherein said numbering scheme is based upon the restriction map of LAV isolate λJ19.

48. A purified DNA fragment of HIV-1 consisting of a restriction fragment generated by the *Kpn*I site at approximately 6100 to the *Bgl*II site at approximately 6500, wherein said numbering scheme is based upon the restriction map of LAV isolate λJ19.

49. A purified DNA fragment of HIV-1 consisting of a restriction fragment generated by the *Kpn*I site at approximately 6100 to the *Bgl*II site at approximately 8750, wherein said

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numbering scheme is based upon the restriction map of LAV isolate λJ19.

50. A purified DNA fragment of HIV-1 consisting of a restriction fragment generated by the *Kpn*I site at approximately 6100 to the *Bgl*II site at approximately 9150, wherein said numbering scheme is based upon the restriction map of LAV isolate λJ19.

51. A purified DNA fragment of HIV-1 consisting of a restriction fragment generated by the *Kpn*I site at approximately 3500 to the *Kpn*I site at approximately 6100, wherein said numbering scheme is based upon the restriction map of LAV isolate λJ19.

52. A purified DNA fragment of HIV-1 consisting of a restriction fragment generated by the *Kpn*I site at approximately 3900 to the *Kpn*I site at approximately 6100, wherein said numbering scheme is based upon the restriction map of LAV isolate λJ19.

ALW 60. A recombinant vector comprising a DNA fragment as claimed in any one of claims 46 through 52.

61. A host cell transformed with a vector as claimed in claim 60.

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62. A purified DNA fragment of HIV-1 consisting of a restriction fragment, wherein the fragment hybridizes to the genomic DNA of HIV-1 under hybridization conditions of 20% formamide, 8X SSC, at 37°C, with washes in 2X SSC, 0.1%SDS, at 37°C.

63. The fragment of claim 62, wherein the hybridizing genomic HIV-1 DNA is λJ19 DNA.

64. A cloned DNA fragment of HIV-1, wherein said fragment hybridizes to the genomic DNA of HIV-1 under hybridization conditions of 20% formamide, 8X SSC, at 37°C, with washes in 2X SSC, 0.1%SDS, at 37°C.

65. The fragment of claim 64, wherein the hybridizing genomic HIV-1 DNA is λJ19 DNA.

66. An isolated double-stranded DNA fragment of HIV-1, wherein a strand of said fragment hybridizes to the genomic DNA of HIV-1 under hybridization conditions of 20% formamide, 8X SSC, at 37°C, with washes in 2X SSC, 0.1%SDS, at 37°C.

67. The fragment of claim 66, wherein the hybridizing genomic HIV-1 DNA is λJ19 DNA.

68. An amplified copy of a DNA fragment of HIV-1, wherein said fragment hybridizes to the genomic DNA of HIV-1 under hybridization conditions of 20% formamide, 8X SSC, at 37°C, with washes in 2X SSC, 0.1%SDS, at 37°C.

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69. The copy of claim 68, wherein the hybridizing genomic HIV-1 DNA is λJ19 DNA.

70. A vector comprising an HIV-1 DNA fragment, wherein said fragment hybridizes to the genomic DNA of HIV-1 under hybridization conditions of 20% formamide, 8X SSC, at 37°C, with washes in 2X SSC, 0.1%SDS, at 37°C.

71. The vector of claim 70, wherein the hybridizing genomic HIV-1 DNA is λJ19 DNA.

72. A host cell transformed with a vector comprising an HIV-1 DNA fragment, wherein said fragment hybridizes to the genomic DNA of HIV-1 under hybridization conditions of 20% formamide, 8X SSC, at 37°C, with washes in 2X SSC, 0.1%SDS, at 37°C.

73. The host cell of claim 72, wherein the hybridizing genomic HIV-1 DNA is λJ19 DNA.

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